

Mr. Evans' reports have traced the cretaceous formation, with its characteristic fossils, from the mouth of the Iowa river to about 300 miles below the Yellow Stone. In this region of country, and west 130 miles from Pierre Chouteau, (on the Missouri four miles above Teton river,) Mr. Evans noticed the following fossils:—*Nucula Hammeri*?, *Ammonites Conradi*, *Morton*, *Inoceramus Crispii*? *Inoceramus planus*, *Inoceramus mytilloides*?, *Inoceramus Cuvieri*, *Nautilus Dekayi*, *Morton*, *Cucullæa vulgaris*, *Morton*, *Pholadomya occidentalis*, *Morton*, *Gryphæa Pitcheri*, *Morton*.

Also—two species of *Avicula*, a *Lucina*, a *Pyrula*?, several undetermined species of *Ammonites* and *Baculites*, two species of *Scaphites*, and a *Diceras*?

On Sage creek, a southern tributary of the Chayenne, heading on the "bad lands," Mr. Evans obtained three species of *Inoceramus*, two of *Ammonites*, *Nautilus Dekayi*, *Cucullæa vulgaris*, &c.

August 27th.

Dr. MORTON, President, in the Chair.

The Committee to which was referred Mr. Cassin's paper, read at last meeting, reported in favor of publication in the Proceedings.

Descriptions of new species of Birds of the genera Paradisea, Pastor, and Duceros, and a proposition to re-name others of the genera Alcyone and Hirundo.

BY JOHN CASSIN.

1. *Paradisea Wilsonii*, nobis.

Form.—Specimen about to be described probably not fully adult, somewhat mutilated, skin of the hinder part of the head wanting. Plumage compact, with elongated feathers from the sides of the neck, and two plumes having their origin at the base of the tail, which latter are curved into circles of about one inch diameter. First primary spurious, third and fourth longest and nearly equal. Exposed portion of the plumage of the back, thread-like; feathers on the belly broad and truncate. Subgenerically related to *Paradisea magnifica*, Lath.

Dimensions.—Total length of skin from tip of bill to end of tail about $7\frac{1}{4}$ in., wing $3\frac{1}{2}$, tail $1\frac{1}{2}$ inches.

Colors.—Back crimson, which color is completely enclosed by an edging of black, and forms a somewhat cordate mantle. Large nuchal spot pale yellow. Front and chin black. Wing coverts and quills hair brown, greater coverts and primaries narrowly edged, secondaries and tertiaries broadly edged with crimson, some of the more exposed tertiaries almost entirely of this color, and tipped with black. Tail and coverts above and below hair brown. Ornamental plumes of the tail steel blue. Elongated feathers on the side of the neck black, with a beautiful coppery lustre, and tipped with bright green. Under parts from the neck to the abdomen silky green, the feathers brown at their bases, and having intermedial (between the brown and the green colors) triangular spots of a deeper glossy green, inclining to blue upon the neck and breast; truncate feathers of the sides and belly tipped with deep shining green, posterior part of abdomen dull brownish black.

Hab.—New Guinea?

Obs.—This very handsome Paradise bird is one of the most valuable and interesting of the many contributions to the collection of this Academy, made by Mr. Edward Wilson, of Lydstip house, Pembrokeshire, to whom I have taken the liberty of dedicating it, as a slight acknowledgment of his valuable services to the cause of the zoological sciences in this country.

This species is a congener of *Paradisea magnifica*, Lath., but does not resemble that, nor any other known species to an extent sufficient to render special designation necessary. All the species are in the collection of the Academy.

The specimen now described was obtained by Mr. Wilson in England, but bears no label indicating locality. It is probably not fully adult.

Pastor nigrocinctus, nobis.

Form.—Specimen now about to be described much mutilated, cranium destroyed and skin of the head much injured, nearly the whole of the wing feathers and legs wanting. Feathers of the hind head somewhat elongated, exposed portion of the plumage of the rump and tail coverts filiform, tail feathers broad, rather abruptly terminated and slightly acuminate. Aberrant, possibly a *Gracula*.

Dimensions.—Total length of skin from tip of bill to end of tail about 8 inches, tail 3 inches.

Colors.—Head (entirely?), broad band completely encircling the middle of the body; (wings?) and tail black with a greenish metallic lustre.

Broad band encircling the anterior third portion of the body, including breast and neck above and below, and another broad band encircling the posterior third portion of the body including abdomen, rump, and tail coverts, saffron yellow, paler on the under tail coverts. Bill yellow.

Hab.—New Guinea?

Obs.—I have seen two specimens only of this bird, one of which is in a museum at Albany; the other is the property of the Academy, and is the specimen now before me. Both were imported by Mr. J. G. Bell, of New York, deservedly well known as a naturalist and taxidermist, by whom the species was first pointed out to me as probably undescribed, and who has also had the kindness to inform me that he received them with skins of Paradise birds. They are mutilated in the same manner as those usually are, and have been subjected to similar methods of preservation; from which facts I have inferred that they may be from New Guinea.

3. *Buceros Fistulator*, nobis.

Form.—Very similar to that of *Buceros Buccinator*, Temm., but is much smaller. Specimen now described probably not fully adult, bill nearly simple.

Comparative Dimensions.

	B. Buccinator.	B. Fistulator.
Total length of skin from tip of bill to end of tail	25 inches,	17 inches.
Wing,	12 “	9½ “
Tail,	10½ “	7½ “

Colors.—Very similar to those of *Buceros Buccinator*, Temm. Lower medial part of breast, abdomen, thighs, under tail coverts, inferior wing coverts, tips of secondary and tertiary quills, and tips of external tail feathers, white, all other parts black with a greenish lustre.

Hab.—Western Africa.

Obs.—Two specimens of the bird now described are in the collection, one of which presented by Mr. Edward Verreaux, of Paris, has the plumage of an adult bird, though its bill is without appendages. In all other respects both specimens are very similar to *B. Buccinator*, Temm., Pl. Col. 276, but are so much smaller that I cannot think it possible they are young birds of that species.]

4. *Alcyone Lessonii*, nobis.

“*Ceyx azurea*, Less.”

“*Alcedo azurea*, Lath.” Lesson, Voy. Coquille, I. p. 690.

Form.—Much resembling that of *Alcyone azurea*, (Lath.) Gould B. of Aust. II, pl. 25, but is larger; the bill is much thicker and wider.

Dimensions.—Total length of skin from tip of bill to end of tail about $6\frac{3}{4}$ inches, wing $3\frac{3}{4}$, tail $1\frac{1}{2}$ inches.

Colors.—Generally resembling those of *A. azurea*, but upon the upper surface of the body are of a deeper and more uniform blue. Entire plumage above deep azure blue, which color extends somewhat upon the sides of the breast. Quills and tail beneath brownish black, the former narrowly edged exteriorly with blue. Small narine spots and another large spot on each side of the neck, yellowish white. Throat nearly white, all the other under parts of the body deep fawn yellow inclining to reddish on the sides.

Hab.—Havre de Dorey, New Guinea.

Obs.—This species is described by Mons. Lesson, as above, but is quite different from the *A. azurea* or either of the other nearly allied Australian species, being decidedly larger and in all respects more robustly organized. It is not figured in Voy. Coquille, though a complete description is given.

One specimen only is in the collection of the Academy, which is another of the valuable acquisitions made in Paris by Mr. Edward Wilson.

5. *Hirundo Gouldii*, nobis.

Hirundo frontalis, Gould. Proc. Zool. Soc. London 1837, p. 22, and Voy. Beagle, Birds, p. 40, (1841.)

Obs.—I propose to apply this name, *Hirundo Gouldii*, to the species described by Mr. Gould as above in 1837; the name given by him, *Hirundo frontalis*, having been previously applied to another species by Quoy and Gaimard, Voy. Astrolabe, Zoologie I, p. 204, (1830.)

Several specimens of both species are in the collection of the Academy.

The Committee to which was referred a paper by Drs. D. D. Owen, and B. F. Shumard, describing new species of Crinoidea from the sub-carboniferous limestone of Iowa, &c., reported in favor of publication in the Journal.

A letter was read from Dr. J. H. Troschel, Professor of Zoology in the University of Bonn, and present editor of the *Archiv. für Naturgeschichte*, announcing the transmission to the Academy of recent numbers of that work, and expressing his desire to exchange for the publications of the Academy, and requesting permission to make translations of papers from the latter for insertion in his work. Whereupon

it was on motion ordered, that the Editor of the "Archiv. für Naturgeschichte" be placed upon the exchange list of the Journal.

Dr. Morton announced the late decease of Prof. Gerard Troost, at Nashville, Tenn., at a very advanced age. The deceased was the first elected President of this Institution.